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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,349	09/12/2003	William Frederick Dew JR.	033753/269257	6747
826	7590	03/07/2005	EXAMINER	
ALSTON & BIRD LLP			CINTINS, IVARS C	
BANK OF AMERICA PLAZA			ART UNIT	
101 SOUTH TRYON STREET, SUITE 4000			PAPER NUMBER	
CHARLOTTE, NC 28280-4000			1724	

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/661,349

Applicant(s)

DEW, WILLIAM FREDERICK

Examiner

Ivars C. Cintins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/12/03 & 4/5/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18-42, 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wen et al. (U.S. Patent No. 4,157,959, hereinafter "Wen") in view of Masuda et al. (U.S. Patent No. 5,248,415, hereinafter "Masuda"). Wen disclose an upflow filter having an actuating means for adjustably compressing filtration media from an expanded condition during cleaning (see Fig. 4) to a variably compressed condition during filtration, whereby a plurality of layers of filtration media are established, the layers being progressively more compressed in the flow direction (see Fig. 3). Accordingly, this primary reference discloses the claimed invention with the exception of the recited compressible filtration media, the multiple filter housings, and the air distribution means. Masuda discloses a filtration apparatus comprising a filter containing compressible filtration media of the type recited (see col. 1, line 27), multiple filter housings (see Fig. 1), and air distribution means (i.e. 10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the compressible filtration media of Masuda for the filtration media of Wen, since this secondary reference filtration media is capable of filtering particulate contaminants from a fluid in substantially the same manner as filtration media of the primary reference, to produce substantially the same results. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of the thus modified primary reference with multiple filter housings, as further suggested by Masuda, in order to allow some filtration cells to be cleaned while other cells continue to filter fluid, thereby

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providing continuous treatment of fluid in this modified primary reference filtration system.

Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of the thus modified primary reference with air distribution means, as further suggested by Masuda (see col. 4, lines 16-19), in order to assist in the cleaning of the filtration media of this modified primary reference filtration system.

Moreover, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select the recited filter bed porosity, bed depth, and compression ratio for the filter media of the modified primary reference system, in order to obtain filtration characteristics commensurate with these selections. Applicant should note that the recited flow rate and backwash flow rate (claims 27-29 and 36-38) are not structural limitations, and hence cannot be relied upon to patentably distinguish these apparatus claims.

Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wen in view of Masuda as applied above, and further in view of Whetsel (U.S. Patent No. 5,362,384). The modified primary reference discloses the claimed invention with the exception of the recited turbidity monitor. Whetsel discloses a filtration system having a turbidity monitor; and it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of the modified primary reference with the turbidity monitor of Whetsel, in order to determine the condition of the filtration media of this modified primary reference system.

WO 00/43097 discloses a similar fluid filtration system employing actuating means for adjustably compressing filtration media from an expanded condition during cleaning to a compressed condition during filtration.

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The Tchobanoglous declaration filed April 5, 2004 have been noted and carefully considered, but is not deemed to be persuasive of patentability for the claims in this application because:

- (1) This declaration does not address the new grounds of rejection; and
- (2) While this declaration enumerates several purported advantages over prior art systems, it provides no evidence, such as comparative data, to support such allegations and conclusions. Mere conclusory statements, unsupported by objective evidence, are entitled to little weight in determining patentability. Cf. *In re Greenfield*, 571 F.2d 1185, 1188, 197 USPQ 227, 229 (CCPA 1978).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (571) 272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Duane Smith, can be reached at (571) 272-1166.

The centralized facsimile number for the USPTO is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ivars C. Cintins
Primary Examiner
Art Unit 1724

I. Cintins
March 4, 2005